

What is claimed is:

1 1. A method comprising:
2 determining, at a first server, to which one of N
3 mirrored servers a request from a client should be routed
4 based at least in part on an address indicating the client and
5 a route to the client and on the quality of service between at
6 least some of the N mirrored servers to the client; and

7 determining to route requests from other clients
8 associated with the address to the one of the N mirrored
9 servers.

1 2. The method of claim 1 further comprising using an
2 end to end connection speed between each of the at least some
3 of the N mirrored servers and the client to define the quality
4 of service between the at least some of the N mirrored servers
5 to the client.

1 3. The method of claim 1 in which a connection metric
2 value between each of the at least some of the N mirrored
3 servers and the client defines the quality of service between
4 each of the at least some of the N mirrored servers to the
5 client.

1 4. The method of claim 3 in which the connection metric
2 value includes a round-trip time value.

1 5. The method of claim 1 in which the address includes
2 an Internet Protocol address.

1 6. The method of claim 1 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 7. The method of claim 1 in which the part of the
2 address indicating a route to the client is not identifiable
3 by inspection of the address.

1 8. The method of claim 1 further comprising routing the
2 request to the one of the N mirrored servers providing the
3 fastest connection speed between the client and any of the at
4 least some of the N mirrored servers.

1 9. The method of claim 1 further comprising determining
2 if the one of the N mirrored servers can handle the load
3 routed to it, and if not, isolating a group of clients
4 associated with the address and routed to the mirrored server
5 by redirecting the group of clients associated with the
6 address and connected to the mirrored server to another one of
7 the N mirrored servers.

1 10. The method of claim 1 further comprising determining
2 if other clients associated with the address and routed to the
3 one of the N mirrored servers experience different connection

4 performance than the client, and if so, isolating the ones of
5 the clients experiencing the different connection performance
6 and directing the ones of the clients to another one of the N
7 mirrored servers.

1 11. The method of claim 10 further comprising
2 associating the address associated with the ones of the
3 clients with the another one of the N mirrored servers and
4 routing requests from clients associated with the address to
5 the another one of the N mirrored servers.

1 12. An article comprising a machine-readable medium
2 which stores machine-executable instructions, the instructions
3 causing a machine to:

4 determine, at a first server, to which one of N mirrored
5 servers a request from a client should be routed based at
6 least in part on an address indicating the client and a route
7 to the client and on the quality of service between at least
8 some of the N mirrored servers to the client; and

9 determine to route requests from other clients associated
10 with the address to the one of the N mirrored servers.

1 13. The article of claim 12 further causing a machine to
2 use an end to end connection speed between each of the at
3 least some of the N mirrored servers and the client to define

4 the quality of service between the at least some of the N
5 mirrored servers to the client.

1 14. The article of claim 12 in which a connection metric
2 value between each of the at least some of the N mirrored
3 servers and the client defines the quality of service between
4 each of the at least some of the N mirrored servers to the
5 client.

1 15. The article of claim 12 in which the connection
2 metric value includes a round-trip time value.

1 16. The article of claim 12 in which the address
2 includes an Internet Protocol address.

1 17. The article of claim 12 in which address includes an
2 Internet Protocol address on a network using classless inter-
3 domain routing.

1 18. The article of claim 12 in which the part of the
2 address indicating a route to the client is not identifiable
3 by inspection of the address.

1 19. The article of claim 12 further causing a machine to
2 route the request to the one of the N mirrored servers
3 providing the fastest connection speed between the client any
4 of the at least some of the N mirrored servers.

1 20. The article of claim 12 further causing a machine to
2 determine if the one of the N mirrored servers can handle the
3 load routed to it, and if not, to isolate a group of clients
4 associated with the address and routed to the mirrored server
5 by redirecting the group of clients associated with the
6 address identifier and connected to the mirrored server to
7 another one of the N mirrored servers.

1 21. The article of claim 12 further causing a machine to
2 determine if other clients associated with the address and
3 routed to the one of the N mirrored servers experience
4 different connection performance than the client, and if so,
5 to isolate the ones of the clients experiencing the different
6 connection performance and routing the ones of the clients to
7 another one of the N mirrored servers.

1 22. The article of claim 21 further causing a machine to
2 associate the address associated with the ones of the clients
3 with the another one of the N mirrored servers and to route
4 requests from clients associated with the address to the
5 another one of the N mirrored servers.

1 23. A method comprising:
2 determining if an address associated with a request sent
3 by a client attempting to connect to a first server over a
4 network exists in a table associated with the first server,

5 where parts of the address indicating the client and a route
6 to the client are unknown; and

7 if so, routing the request to one of N mirrored servers
8 that is associated with the address in the table as having the
9 fastest connection speed between the address and the one of
10 the N mirrored servers.

1 24. The method of claim 23 in which the address includes
2 an Internet Protocol address.

1 25. The method of claim 23 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 26. The method of claim 23 further comprising, if the
2 address does not exist in the table, performing a round robin
3 operation to route the request to one of the N mirrored
4 servers.

1 27. The method of claim 25 in which the round robin
2 operation includes mirrored servers that no client associated
3 with the address has been routed to.

1 28. The method of claim 25 further comprising, after
2 each of the N mirrored servers gets scheduled in a round robin
3 operation or otherwise has a known connection speed to the
4 address, adding the address to the table.

1 29. The method of claim 23 further comprising routing
2 requests from other clients associated with the address to the
3 same mirrored server as the client.

1 30. The method of claim 23 further comprising
2 determining if other clients associated with the address and
3 routed to the determined mirrored server experience different
4 connection performance than the client, and if so, isolating
5 the ones of the clients experiencing the different connection
6 performance and directing the ones of the clients to another
7 one of the N mirrored servers.

1 31. A system comprising:
2 N mirrored servers including a first server; and
3 a mechanism associated with the first server and
4 configured to determine if an address indicating a client and
5 a route to the client exists in a table associated with the
6 first server, and
7 if so, to route a request from the client to a one of the
8 N mirrored servers that is associated with the address in the
9 table as providing desirable quality of service between the
10 address and the one of the N mirrored servers.

1 32. The system of claim 31 in which the address includes
2 an Internet Protocol address.

1 33. The system of claim 31 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 34. The system of claim 31 in which the mechanism is
2 also configured, if the address does not exist in the table,
3 to perform a round robin operation to route the request among
4 the N mirrored servers.

1 35. The system of claim 31 in which the mechanism is
2 also configured to associate the one of the N mirrored servers
3 that is proximally nearest to the client with the address in
4 the table.

1 36. The system of claim 31 in which the mechanism is
2 also configured to redirect the request to another one of the
3 N mirrored servers if the mirrored server it is routed to
4 cannot handle the load routed to it.

1 37. A method comprising:

2 performing a round robin procedure to determine to which
3 one of N mirrored servers client requests coming from clients
4 in a group of clients having the same address should be
5 routed;

6 after a client request has been scheduled for each server
7 in the N mirrored servers in the round robin procedure,

8 isolating addresses of clients in the group of clients having
9 similar performance and associating a server providing the
10 fastest connection speed with each isolated address; and

11 directing future requests from clients having one of the
12 isolated addresses to the server associated with the isolated
13 address as providing the fastest connection speed.

1 38. The method of claim 37 in which the address includes
2 topologically-significant information associated with the
3 client and topologically-insignificant information associated
4 with the client.

1 39. An article comprising a machine-readable medium
2 which stores machine-executable instructions, the instructions
3 causing a machine to:

4 group clients associated with the same address having a
5 topologically-significant segment and a topologically-
6 insignificant segment into clusters; and

7 route requests from clients in a cluster to the same one
8 server included in the group of N mirrored servers.

1 40. The article of claim 39 in which the requests are
2 routed to the one of the N mirrored servers based on quality
3 of service between at least some of the clients and at least
4 some of the N mirrored servers.

1 41. The article of claim 39 further causing a machine to
2 detect a performance difference between two or more
3 clients grouped in a cluster,
4 isolate the ones of the clients in the cluster
5 experiencing the performance difference, and
6 group the ones of the clients in another cluster.

1 42. The article of claim 39 in which the topologically-
2 significant segment of the address and the topologically-
3 insignificant segment of the address cannot be identified by
4 inspecting the address in binary form.

1 43. The article of claim 39 in which the topologically-
2 significant segment of the address includes information on a
3 route to a client and the topologically-insignificant segment
4 of the address includes information on the client.

1 44. The article of claim 39 further causing a computer
2 to determine if a server in the group of N mirrored servers
3 can handle the load routed to it, and if not, isolate a group
4 of clients connected to the server and direct the group of
5 clients to another server in the group of N mirrored servers.